

I Claim As My Invention:

1. A system for capturing optical information during a capture operation, comprising:
 - (a) a photosensitive subsystem to capture optical information;
 - (b) an optical subsystem for directing optical information from a field of view onto said photosensitive subsystem; and
 - (c) a processor subsystem coupled with said photosensitive subsystem to process output from said photosensitive subsystem;
 - (d) wherein the processor subsystem selectively processes only a selected segment of the field of view during a capture operation.
2. The system of claim 1, wherein when a segment of the field of view is selected, the processor processes such segment during the capture operation to determine its suitability for retention.
3. The system of claim 2, further comprising a user interface system enabling the user to select a segment of the field of view for retention.
4. The system of claim 1, wherein the processor subsystem automatically selects a segment from the field of view for processing during a capture operation.

5. The system of claim 1, with said photosensitive subsystem comprising a photosensitive array for capturing two-dimensional optical information

6. The system of claim 5, further comprising a user feedback subsystem to assist the user in selecting a segment comprising two-dimensional optical information within the field of view.

7. The system of claim 5, further comprising a pattern recognition subsystem configured to assist a user in selecting a segment comprising two-dimensional optical information within the field of view.

8 The system of claim 1, further comprising a housing of a size and shape suited for hand-held operation for directing the field of view during capture of optical information.

9. The system of claim 1, wherein said photosensitive subsystem comprises a photosensitive array for capture of linear optical information.

10. The system of claim 9, with the optical subsystem comprising a rastering device configured to raster a plurality of one-dimensional image segments of two-dimensional optical information onto said photosensitive

array during a capture operation.

11. The system of claim 1, with said optical subsystem comprising a zoom subsystem for enlarging a segment of the field of view for capture by the system.

12. The system of claim 5, with said optical subsystem comprising a focusing subsystem configured to variably focus two-dimensional optical information onto said photosensitive subsystem.

13. The system of claim 5, further comprising a decoding subsystem configured to decode two-dimensional optical information.

14. A method for capturing optical information, comprising:

directing a reader at optical information to be read, wherein said reader includes:

a photosensitive subsystem to capture optical information;

an optical subsystem positioned relative to said photosensitive subsystem so as to direct optical information from a field of view onto said photosensitive subsystem; and

a processor subsystem coupled with said photosensitive subsystem to process output from said photosensitive subsystem; and
selecting by means of the processor subsystem a region of the field of view to be processed by the processor subsystem.

15. The method of claim 14, wherein a housing of a size and shape suited for hand-held operation, is directed to place a desired target within the field of view.

16. The method of claim 14, wherein said photosensitive subsystem comprises a one-dimensional photosensitive array.

17. The method of claim 16, wherein said reader further comprises a rastering device configured to raster one-dimensional image segments of two-dimensional optical information onto the one-dimension photosensitive array.

18. The method of claim 14, wherein said photosensitive subsystem comprises a two-dimensional photosensitive array.

19. The method of claim 14, with the reader further comprising a zoom subsystem, said method comprising enlarging a selected region within the field of view by means of the zoom subsystem.

20. The method of claim 14, with the reader further comprising a focusing subsystem configured to variably focus two-dimensional optical information onto the photosensitive subsystem.

21. The method of claim 14, wherein the reader further comprises a photosensitive array control subsystem, coupled with said photosensitive subsystem, for reading out only pixels of the photosensitive subsystem which correspond to the selected region of the field of view.

22. The method of claim 14, wherein the reader further comprises a user feedback subsystem to advise a user of the region comprising two-dimensional optical information in the field of view which has been selected for processing by the processor subsystem, said method further comprising presenting to the user the selected region by means of the user feedback subsystem.

23. The method of claim 14, wherein the reader further comprises:
a pattern recognition subsystem configured to assist the processor

subsystem in recognizing two-dimensional optical information, said method further comprising utilizing the pattern recognition subsystem to assist in selecting a region of the field of view to be processed.

24. The method of claim 23, wherein the pattern recognition subsystem comprises a neural network.

25. The method of claim 14, further comprising the step of removing user hand jitter from two-dimensional information displayed to the user.

26. The method of claim 14, wherein the reader further comprises a decoding subsystem configured to decode two-dimensional optical information, said method comprising utilizing the decoding subsystem to decode a region of the field of view comprising two-dimensional optical information.

27. A system for reading optical information, comprising:
a photosensitive subsystem for capturing optical information during a capture operation; and
an optical subsystem associated with said photosensitive subsystem for directing optical information from a field of view onto said photosensitive system;
wherein a processing subsystem enables selection of a region of field of view for processing during a capture operation.

28. The system of claim 27, further comprising a portable reader having a power supply for providing operating power, and for manipulation to direct the optical subsystem to place a desired target within the field of view.

29. The system of claim 27, further comprising:

a pattern recognition subsystem configured to assist a user in selecting a region of the field of view for processing during a capture operation.

30. The system of claim 27, further comprising a user feedback subsystem to facilitate user selection of a region of the field of view for processing during a capture operation.

31. The system of claim 27, wherein said photosensitive subsystem comprises a one-dimensional array of photosensitive pixels.

32. The system of claim 31, further comprising a raster device configured to raster one-dimensional image segments of two-dimensional optical indicia onto said one-dimensional array.

33. The system of claim 27, wherein said photosensitive subsystem is a two-dimensional array of photosensitive pixels.

34. The system of claim 27, further comprising a zoom subsystem.
35. The system of claim 27, further comprising a focusing subsystem configured to variably focus optical information onto said photosensitive subsystem.
36. A two-dimensional optical information reading system, comprising:
- means for sensing two-dimensional optical information;
 - means for directing two-dimensional optical information onto said means for sensing two-dimensional optical information;
 - means for processing, coupled with said means for sensing two-dimensional optical information, to process output from said means for sensing two-dimensional optical information; and
 - means for selecting a region of a field of view of the means for directing, for processing by the means for processing.